HAER No. CO-75-E

GLENN L. MARTIN COMPANY,
Titan Missile Test Facilities, Control Building A
Waterton Canyon Road and Colorado Highway 121
Vicinity of Lakewood
Jefferson County
Colorado

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PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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Significance: This blastproof enclosure enabled technicians to conduct and observe the captive firings at Test Stands D-1 and D-2. The Control Building also served as a training center for launch crews and as a proving ground for the equipment used at the the Titan I and II operational sites.

Description: Control Building A is located on the north rim of a narrow box canyon, midway between Captive Test Stands D-1 and D-2. Measuring approximately 59 by 99 feet, the fortress-like, two-story Control Building is rectangular in plan, with parapet walls and a flat roof. A three-sided entrance bay centered in the principal (south) elevation contains a double pair of vault-type steel blast doors. Three small observation ports on each side of the bay are glazed with bulletproof glass. Designed to protect its occupants in the event of a missile explosion, Control Building A has thick reinforced-concrete walls capable of withstanding the blast from nearly half a million pounds of TNT. The building was originally equipped with an emergency generator, a closed-circuit ventilation system, and its own water supply. Twin consoles located on the second floor contained electronic equipment that enabled technicians to control, monitor and record operations at Captive Test Stands D-1 and D-2. The instrumentation and control cables linking the consoles to the Test Stands passed through partially buried reinforced concrete tunnels connected to each end of the Control Building.

History: Control Building A was designed by the Aerojet-General Corporation of Sacramento, California, and was built in 1956-57 by the George A. Fuller Company, general contractor for the Martin plant. The building was fitted with new electronic ground control equipment in 1960-61 to accommodate the advanced Titan II missile. The structure remains in use as a Records Retention Center (archive) for the Martin-Marietta Astronautics Group.

Sources: A concise description of Control Building facilities and operations appeared in an undated <u>Denver Post</u> reprint published as a Martin Company brochure. See "The Denver Post Visits Martin Denver," pages 12-14. A copy of the brochure is included in the Business and Industry, Colorado, file at the Western History Department, Denver Public Library. Other sources include original project blueprints located in the Plant Engineering Department at Martin-Marietta Astronautics Group, Denver, CO. The Company's Photographics Department maintains a large collection of black-and-white and color photographs depicting equipment and activities inside the Control Building. The conversion for Titan II is recorded in "First Titan II Propulsion System Test Firing at M-D," <u>Martin Mercury</u> 18 (16 June 1961): O.

Historians: John F. Lauber and Jeffrey A. Hess; Hess, Roise and Company, 1994.